

# Marshfield Clinic Health System

## 2023 OUTPATIENT AntibioGram

Gram-negative Enterobacteriales % Susceptible	No. Tested	Ampicillin	Amoxicillin-clav	Piperacillin-tazo	Ceftriaxone	Cefepime	Ertapenem	Meropenem	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Tetracycline	Trimeth-Sulfa
<i>Citrobacter freundii</i>	92	R	R	-	-	99	99	100	100	95	96	91	88	85	89
<i>Citrobacter koseri</i>	56	R	98	98	100	100	100	100	100	100	100	98	98	100	100
<i>Enterobacter cloacae</i>	186	R	R	-	-	98	96	99	99	97	97	96	91	90	89
<i>Escherichia coli</i>	3634	68	89	97	96	99	100	100	100	94	94	88	85	84	86
<i>Klebsiella aerogenes</i>	70	R	R	-	-	100	99	100	100	99	99	100	97	97	99
<i>Klebsiella oxytoca</i>	129	R	91	91	91	100	100	100	100	97	97	97	98	94	96
<i>Klebsiella pneumoniae</i>	545	R	98	95	98	100	100	100	100	99	98	94	93	87	95
<i>Proteus mirabilis</i>	267	86	93	100	99	100	87	100	100	91	92	89	88	R	85
<i>Serratia marcescens</i>	59	R	R	-	95	98	97	100	100	100	90	93	90	25	100

Gram-negative Non-Enterobacteriales % Susceptible	No. Tested	Piperacillin-tazo	Ceftazidime	Cefepime	Meropenem	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Minocycline	Trimeth-Sulfa
<i>P. aeruginosa</i>	379	96	96	96	95	-	98	91	83	R	R
<i>S. maltophilia</i> [2]	44	R	66	-	-	-	R	-	89	100	89

### Susceptibility

≥ 90%
60-89%
< 60%

### Analysis Key

R	Isolate is intrinsically resistant
-	Not tested or clinically ineffective

### Contact Information

- For susceptibility test questions and data analysis please contact: Dr. Thomas Novicki, Dr. Sophi Arbefeville, or Dr. Taylor Wahlig at 715-387-6300 or ext. 16300
- For antimicrobial stewardship questions please contact: Philip (Logan) Whitfield at 715-387-7578 or ext. 77578
- For urgent questions regarding specific patient cases, please consult your local infectious diseases physician.

### Notes

[U] Breakpoints exist only for urinary isolates. Other sources of infection are not tested

[1] Inpatient and outpatient isolates combined

Gram-positive Streptococci and Enterococci % Susceptible	No. Tested	Ampicillin	Amoxicillin	Penicillin	Ceftriaxone	Meropenem	Clindamycin	Erythromycin	Levofloxacin	Ciprofloxacin	Linezolid	Nitrofurantoin	Tetracycline	Trimeth/Sulfa	Vancomycin
<b>Streptococci</b>															
<i>Grp. B Streptococcus agalactiae</i>	245	100	SP	100	-	-	41	43	98	-	100	-	20	-	100
<i>Grp. A Streptococcus pyogenes</i>	56	100	SP	100	-	-	91	91	100	-	100	-	89	-	100
<i>Grp. G Streptococci</i>	47	100	SP	100	-	-	87	89	94	-	100	-	77	-	100
<i>S. pneumoniae (Non-meningeal)[3]</i>	73	SP[1]	SP[1]	97	100	91	-	65	95	-	-	-	62	87	100
<i>S. pneumoniae (Meningeal)[3]</i>	73	-	-	75	97	91	-	-	-	-	-	-	-	-	100
<b>Enterococci</b>															
<i>Enterococcus faecalis</i>	545	100	-	100	R	-	R	10	90[U]	88[U]	98	100[U]	30[U]	R	100
<i>Enterococcus faecium</i>	35	43	-	43	R	-	R	R	34[U]	31[U]	97	29[U]	37[U]	R	54

Gram-positive Staphylococci % Susceptible	No. Tested	Penicillin	Oxacillin	Ceftaroline	Vancomycin	Erythromycin	Clindamycin	Gentamicin[2]	Trimeth/Sulfa	Linezolid	Daptomycin	Nitrofurantoin	Rifampicin[2]	Tetracycline
<i>Staphylococcus aureus</i>	955	24	72	100	100	59	77	99	95	100	100	100[U]	99	89
<i>Staphylococcus lugdunensis</i>	67	-	93	-	100	93	93	100	100	100	100	100[U]	100	96
<i>Staphylococcus epidermidis</i>	225	-	40	-	99	28	56	90	56	100	100	100[U]	100	69
<i>Other Coag-negative Staphylococci [4]</i>	79	-	70	-	100	63	70	78	75	100	100	98[U]	89	72

#### Susceptibility

≥ 90%
60-80%
< 60%

#### Analysis Key

R	Isolate is intrinsically resistant
-	Antimicrobial is not tested
SP	Susceptibility inferred from testing other agent

#### Notes

[1] Based on susceptibility to standard dose IV penicillin, susceptibility to oral penicillin, and studies of clinical efficacy, nearly all non-meningeal pneumococcal infections can be effectively treated with IV ampicillin or with high dose oral amoxicillin (in children: 80-100 mg/kg/day divided TID; adult dose and maximum dose in children: 1 g TID)

[2] Should only be used in combination with other active agents

[3] Inpatient and Outpatient isolates combined

[4] Other Coag-negative Staphylococci including *Staphylococcus haemolyticus* and *Staphylococcus intermedius*